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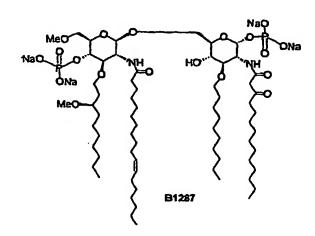
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(54) Title: REAGENTS AND METHODS FOR PREPARING LPS ANTAGONIST B1287 AND STEREOISOMERS THEREOF



(57) Abstract: The present invention provides methods for preparing LPS antagonist lipodisaccharide B1287 and stereoisomers thereof, which compounds are useful as in the prophylactic and affirmative treatment of endotoxemia including sepsis, septicemia and various forms of septic shock. Also provided are synthetic intermediates useful for implementing the inventive methods.

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INTERNATIONAL SEARCH REPORT

ti tlonal Application No PCT/US2004/004921

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| IPC 7 | SFICATION OF SUBJECT MATTER C07H3/04 C07H15/12 C07H9/ | 04 | | | | | | |
| According to International Patent Classification (IPC) or to both national classification and IPC | | | | | | | | |
| B. FIELDS SEARCHED . | | | | | | | | |
| Minimum documentation searched (classification system followed by classification symbols) IPC 7 C07H | | | | | | | | |
| Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched | | | | | | | | |
| Electronic d | fata base consulted during the international search (name of data | | | | | | | |
| Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, WPI Data, CHEM ABS Data, BEILSTEIN Data | | | | | | | | |
| | ENTS CONSIDERED TO BE RELEVANT | | | | | | | |
| Category • | Citation of document, with indication, where appropriate, of the r | elevant passages | Relevant to claim No. | | | | | |
| X | WO 96/39411 A (KOBAYASHI SEIICHI; EISAI CO LTD (JP); KAWATA TSUTOMU (US); CHRIST WIL) 12 December 1996 (1996-12-12) cited in the application | | 129,139 | | | | | |
| A | page 47 the whole document | | 1-124, 130-134 | | | | | |
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| | er documents are listed in the continuation of box C. | Patent family members are listed in | in annex. | | | | | |
| considered to be of particular relevance earlier document but published on or after the international filing date 'L' document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) 'O' document referring to an oral disclosure, use, exhibition or other means 'P' document published prior to the international filing date but later than the priority date claimed | | *T* later document published after the International filing date or priority date and not in conflict with the application but clted to understand the principle or theory underlying the invention state. *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone invention and the considered to involve an invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. *&* document member of the same patent family | | | | | | |
| Date of the actual completion of the international search 9 August 2004 | | Date of mailing of the international search report 1 9. 11. 2004 | | | | | | |
| Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentiaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo ni, Fax: (+31-70) 340-3016 | | Authorized officer Fink, D | | | | | | |

INTERNATIONAL SEARCH REPORT

■ternational application No.
PCT/US2004/004921

| Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet) | | | | | | |
|--|--|--|--|--|--|--|
| This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons: | | | | | | |
| Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely: | | | | | | |
| Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically: | | | | | | |
| 3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a). | | | | | | |
| Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet) | | | | | | |
| This International Searching Authority found multiple inventions in this international application, as follows: | | | | | | |
| see additional sheet | | | | | | |
| As all required additional search fees were timely paid by the applicant, this international Search Report covers all searchable claims. | | | | | | |
| 2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee. | | | | | | |
| 3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.: | | | | | | |
| No required additional search fees were timely paid by the applicant. Consequently, this international Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.: 1-124, 130-134 | | | | | | |
| Remark on Protest The additional search fees were accompanied by the applicant's protest. No protest accompanied the payment of additional search fees. | | | | | | |

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-124,130-134

the processes of the present claims 1-119 and the synthetic intermediates of the present claims 120-124 and 130-134;

2. claims: 125-129,135-139

the synthetic intermediates of the present claims 125-129 and 135-139

INTERNATIONAL SEARCH REPORT

information on patent family members

tz ional Application No PCT/US2004/004921

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